

SATELLITE NAVI LINK

User's Guide

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Introduction

This manual describes how to install CASIO SATELLITE NAVI LINK software, a map viewer application that is also capable of linking with the CASIO SATELLITE NAVI Watch. It also provides general information about how to start up and use the software.

Note

- See SATELLITE NAVI LINK online help for full details about its screens and how to perform its various operations.

SATELLITE NAVI LINK Features

- Connect your computer to the Interface/Charger Unit of your CASIO SATELLITE NAVI Watch to upload GPS data from the Watch to your computer, and download points you plot with SATELLITE NAVI LINK to the Watch.
- Click a point on the general view map to see a more detailed view. Displayed maps can be zoomed in or out.
- Support for two different map image types: a vector map, which is a blank white screen that shows only the latitude and longitude lines of the area; and raster maps, which are scans of paper maps or charts.
- Registration of scanned raster map bitmap or JPEG images as SATELLITE NAVI LINK maps.
- Creation of landmarks, track points, and waypoints, which can be downloaded to the CASIO SATELLITE NAVI Watch, or exported to a CSV for text format file. Points exported to a file can be re-imported when you need them.
- Bookmarking, which lets you mark specific map areas for later recall with the click of a mouse.

Important!

- Maps you scan for use with this product should be for your own personal use only. Never use maps in a way that might violate the copyright of others.

About this document

All mentions of “the Watch” in this document refer to the CASIO SATELLITE NAVI Watch (Module No. 2240).

Minimum Computer System Requirements

The following shows the minimum computer system requirements to run SATELLITE NAVI LINK.

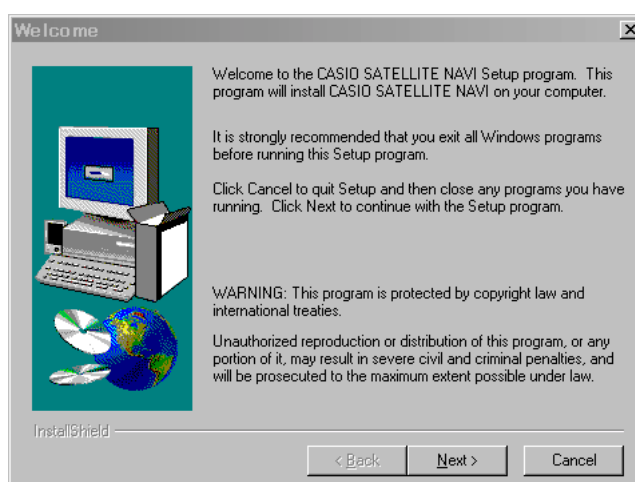
- Computer: IBM PC/AT compatible
- Operating System: Windows 95, 98, or Windows NT 4.0 Workstation
- CPU: Pentium® 166MHz or higher
Pentium® II 200MHz or higher recommended
- Memory: At least 64MB (RAM)
- Hard Disk: At least 10MB of available space
- Monitor: 800 × 600 dots, at least 16-bit high-color
1,024 × 768 dots at least 16-bit high-color or greater recommended
- Other: CD-ROM drive, COM (serial) port (9-pin), keyboard, mouse

Operating Precautions

- Check the following points whenever you have problems uploading or downloading data.
 - ☐ Is another application using the same COM port?
 - ☐ Is the COM port set up correctly?
 - ☐ This application supports BMP or JPEG map image files. To use another type of file, first use other image editing software to convert it to a BMP or JPEG file.
- The following shows the characters that can be used in the names of the Watch's landmark, waypoint, and track data: upper-case alphabetic characters, numbers, spaces, and symbols (colon, slash, period).
- Sending data from your computer to the Watch automatically overwrites all the data currently in Watch memory. Make sure you no longer need the data in Watch memory before you send data to it from your computer.
- Be sure to back up all important data on your computer hard disk or some other medium. Data stored in Watch memory can be unexpectedly lost due to malfunction, repair, etc.
- GPS data files are stored in a folder named **DATA**, which is located in the **CASIO SATELLITE NAVI** folder. Uninstalling or re-installing SATELLITE NAVI LINK deletes the **DATA** folder, so we recommend that you save a backup copy of the folder in another location. The export function of SATELLITE NAVI LINK makes data backup quick and easy.
- Uninstalling or re-installing SATELLITE NAVI LINK also deletes any maps you have registered and latitude and longitude information you have input. Be sure to save latitude and longitude information in another location.

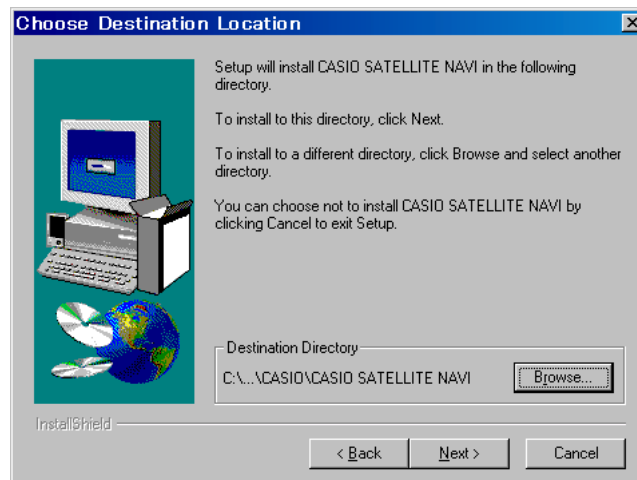
Installing SATELLITE NAVI LINK

1. Start Windows, and place the CASIO SATELLITE NAVI SOFTWARE CD-ROM into your computer's CD-ROM drive.
2. Click **Start**, point to **Settings**, click **Control Panel**, and then double-click **Add/Remove Programs**.
3. On the dialog box that appears, click **Install**.
4. On the next dialog box that appears, click **Next**.
5. On the **Run Installation Program** dialog box, click **Browse**.
6. Navigate to the CD-ROM, open the **Software** folder, select the **Setup** icon, and then click **Open**, which should take you back to the **Run Installation Program** dialog box.
7. Click **Finish** to launch the installer.
8. On the **Welcome** dialog box that appears once the installer is started, click **Next**.



9. Carefully read the Software License Agreement that appears, and then click **Yes** to accept its terms and proceed with the installation.
10. Carefully read the information on the ReadMe dialog box that appears, and then click **Next**.

- 11.** On the next screen that appears, specify the destination location folder where the SATELLITE NAVI LINK application will be installed, and then click **Next**.



- The dialog box initially shows the default installation folder name. You can leave this as it is, or you can click **Browse** and specify a different folder.
- 12.** Specify the program folder where the SATELLITE NAVI LINK application icon should be added, and then click **Next**.
- To select an existing folder, select its name in the list.
 - To create a new folder, type the name you want to give it into the **Program Folder** box.
- 13.** Check the installation settings to make sure they are what you want, and then click **Next** to start the installation.
- 14.** Click **Finish** to complete the installation.

Uninstalling SATELLITE NAVI LINK

To uninstall SATELLITE NAVI LINK, double-click the Control Panel **Add/Remove Programs** applet, select **CASIO SATELLITE NAVI**, and then click **Add/Remove**.

Using SATELLITE NAVI LINK

This section provides generation information on the following basic SATELLITE NAVI LINK operations. See online help for more details.

- Starting up and quitting SATELLITE NAVI LINK (page 7)
- Using the initial SATELLITE NAVI LINK map screen (page 7)
- Registering a map image (page 9)
- Using bookmarks (page 9)
- Using landmarks (page 10)
- Sending data between your Watch and computer (page 11)
- Exporting and importing data (page 16)

Starting Up SATELLITE NAVI LINK

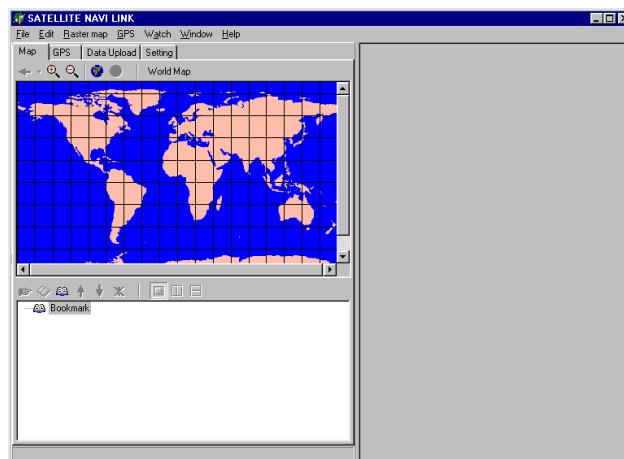
Use the following procedure to start up SATELLITE NAVI LINK.

Click **Start** → **Programs** → **CASIO SATELLITE NAVI SOFTWARE** → **SATELLITE NAVI LINK**.

- To quit SATELLITE NAVI LINK, click **File** → **Exit** on the menu.

Using the Initial SATELLITE NAVI LINK Map Screen

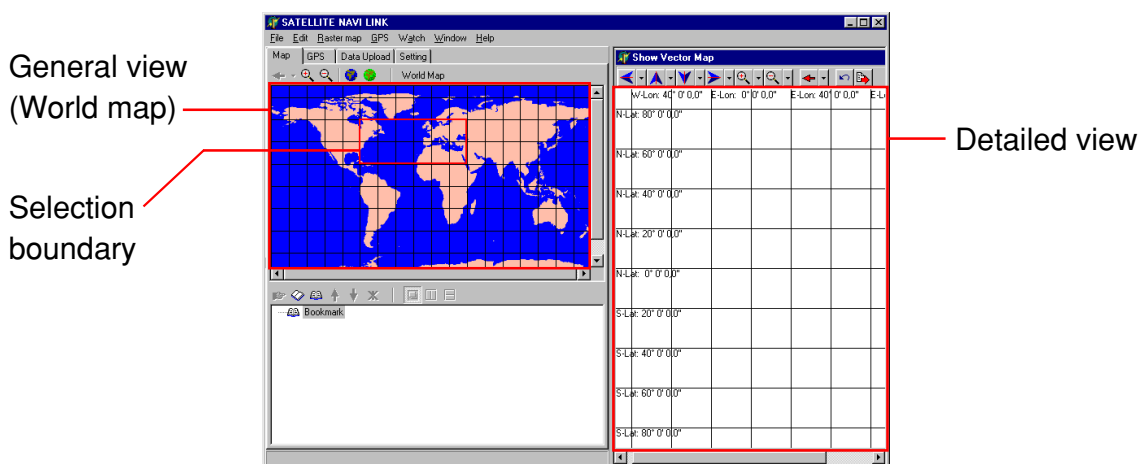
A screen like the one shown below appears when you first start SATELLITE NAVI LINK.



You can use the procedure below to select a specific area on the world map and display it in the detailed view.

To display the detailed view of an area

- 1.** On the world map, move the mouse pointer to one of the corners of the area you want.
- 2.** Holding down your mouse button, slowly drag the mouse pointer across the world map.
 - This causes a red selection boundary to appear on the world map. The size of the selection boundary changes as you drag the mouse pointer.
- 3.** When the selection boundary encloses the area you want, release the mouse button.
 - This causes a detailed view of the area inside the selection boundary to appear on the right side of the screen.



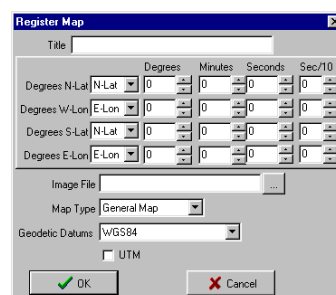
- Note that the detailed view that appears in this case is a blank white screen that shows only the latitude and longitude lines of the area you selected. No topographical details are shown.
- You can place landmarks on the blank white screen and display plot points (page 10).

Registering a Raster Map Image

SATELLITE NAVI LINK lets you register a raster map image you scanned from a paper map, or obtained from a CD-ROM or other source. Registered maps can be displayed in the detailed view on the SATELLITE NAVI LINK **Map** tab. Just make sure you keep a record of the map's latitudes on its north and south edges, and its longitudes on its east and west edges. You will need to provide this information when registering the map.

To register a map image

1. Prepare a BMP or JPEG map image file.
 - You can prepare an image file by scanning it or by using data from a map CD. Note that map image data on a CD may require conversion to BMP or JPEG data before you can register it as a SATELLITE NAVI LINK map.
2. On the SATELLITE NAVI LINK screen, click the **Map** tab.
3. Click the  button to display the dialog box for registering a map image.
4. Make the required settings using the dialog box.
 - See SATELLITE NAVI LINK online help for details about the settings.
5. After everything is the way you want, click **OK** to register the map.
 - Raster maps you register in SATELLITE NAVI LINK are linked with the map in the General view on the **Map** tab. Any area on the General view map for which a linked raster map is available is indicated by a blue boundary around the area. The color of the boundary is red when the linked raster map for the area is displayed in the Detailed view.
 - You can display a list of the raster maps you currently have registered by clicking the  button on the **Map** tab. See SATELLITE NAVI LINK online help for details.



Using Bookmarks

A bookmark makes it possible for you to jump to a particular point on a map with a click of the mouse. To create a bookmark for the area that is currently displayed in the Detailed view, click the  button on the **Map** tab. This adds a bookmark to the bookmark list. See SATELLITE NAVI LINK online help for full details about using bookmarks.

Using Landmarks

Landmarks are managed in groups, and each group can have up to 200 landmarks. The number of groups you can create is limited only by the capacity of your computer's hard disk.

Important!

- The following describes the procedure for using landmarks only. The procedures for waypoints and track points are similar. See online help for more information.

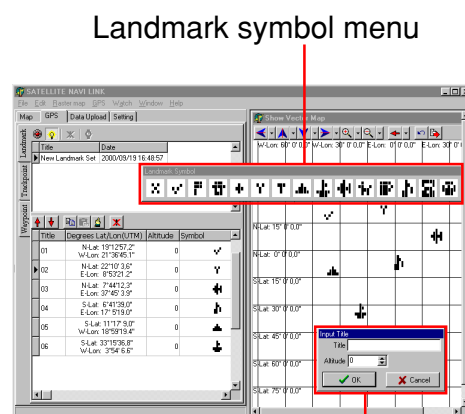
To plot landmarks on the detailed view

1. Display the detailed view of the area where you want to plot landmarks.
2. Click the **GPS** tab, and then click the **Landmark** data type tab.
3. Click the  button.

- This causes a landmark symbol menu to appear.

4. Drag a symbol from the landmark symbol menu, and drop it where you want onto the detailed view.

- This displays a dialog box for inputting name and altitude information for the landmark.



Input name and altitude information for the landmark.

5. Input the name and altitude (if you have it) for the landmark, and then click **OK**.
- You must input something for the landmark name.
- At this point, you could use drag and drop to move the landmark to a different location on the map, if you want.
- You can also reposition a landmark by double-clicking its latitude/longitude information in the landmark list and then inputting the position values you want.
6. Repeat steps 4 and 5 for other landmarks, if you want.
7. After you are finished, click the  button.
8. In response to the confirmation message that appears, click **Yes**.
9. On the dialog box that appears, type in a name for the new landmark group and then click **OK** to save the landmarks.

To display landmarks in the detailed view

1. Click the **GPS** tab, and then click the **Landmark** data type tab.
2. Click the name of the landmark group whose landmarks you want to display.
3. Click the  button.
 - This causes the landmarks to appear in the detailed view. It also causes the landmark symbol menu to appear.
 - If the landmarks do not appear, it may be because they are outside the area currently displayed in the detailed view. Scroll the detailed view until the landmarks appear.
 - You can add landmarks to the current landmark group by dragging symbols from the menu into the detailed view.
4. To deselect the current landmark group and clear the landmark symbol menu, click the  button again.

Sending Data Between Your Watch and Computer

This section describes basic steps for data uploads and downloads between your computer running SATELLITE NAVI LINK, and your SATELLITE NAVI Watch. See SATELLITE NAVI LINK online help for further details and for descriptions of windows and dialog boxes.

Preparing for Data Communication

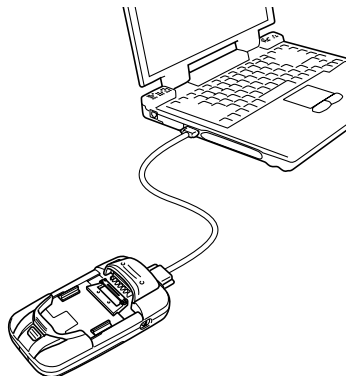
Before you can perform a data communication operation, you must use the following procedures to connect the Watch's Interface/Charger Unit to your computer. You must also configure SATELLITE NAVI LINK by specifying the COM port on your computer where the Interface/Charger Unit is connected. You need to perform the port specification procedure only once, before using SATELLITE NAVI LINK for the first time (or after you change to another COM port.)

Important!

- You cannot use a COM port for CASIO SATELLITE NAVI data communication while another application is using the same COM port. Conversely, a COM port being used for CASIO SATELLITE NAVI data communication cannot be used by another application.

To connect the Interface/Charger Unit to your computer

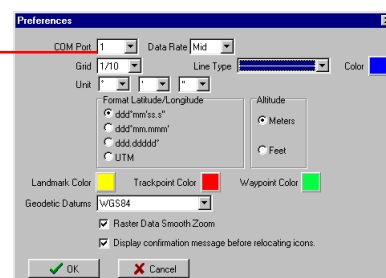
1. Make sure your computer and Interface/Charger Unit are turned off.
2. Use the serial cable that comes with your watch (Watch) to connect the Interface/Charger Unit to a COM port (9-pin) on your computer.



To configure SATELLITE NAVI LINK for data communication

1. Start SATELLITE NAVI LINK.
2. On the **File** menu, click **Preferences** to display the **Preferences** dialog box.
3. Use the **COM Port** box to specify the COM port of your computer where you plan to connect the Interface/Charger Unit.
4. Click **OK** to apply your setting.

COM Port



Note

- You can also use the **Preferences** dialog box to specify grid line type and color, and other SATELLITE NAVI LINK configuration settings. See online help for more information.

Basic Data Communication Steps

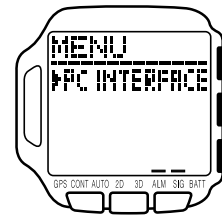
The following procedure describes the basic steps you need to perform each time you upload or download data using SATELLITE NAVI LINK. See online help for more details.

Important!

- Before performing the following procedure, make sure you connect the Interface/Charger Unit to your computer (page 12) and configure SATELLITE NAVI LINK for data communication (page 12).

To perform data communication

1. Start SATELLITE NAVI LINK.
2. Perform one of the procedures under “Watch-to-PC Data Transfer” on page 14 to prepare SATELLITE NAVI LINK for data uploading or “PC-to-Watch Data Transfer” on page 15 to prepare it for downloading.
3. When the message telling you to connect the Interface/Charger Unit to the COM port appears on your computer screen, perform the required operation on the Watch to display the **PC INTERFACE** Screen.
 - See the User’s Guide that comes with the Watch for information about displaying the **PC INTERFACE** Screen.
4. Mount the Watch onto the Interface/Charger Unit, and then press the Watch’s  button.
 - See the User’s Guide that comes with the Watch for information about mounting it on the Interface/Charger Unit.
5. When the message “WAITING” appears on the **PC INTERFACE** Screen, click **OK** on the SATELLITE NAVI LINK confirmation screen.



Important!

- Never remove the Watch from the Interface/Charger Unit while data communication is in progress.

Watch-to-PC Data Transfer

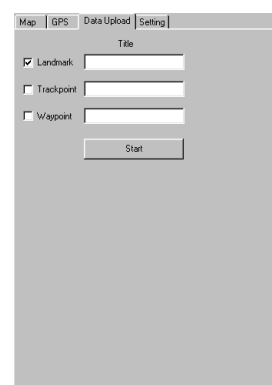
Use the procedures in this section when you want to transfer landmark, track point, route plan, or setup data from your Watch to SATELLITE NAVI LINK.

Important!

- Before performing the procedures in this section, make sure you connect the Interface/Charger Unit to your computer (page 12) and configure SATELLITE NAVI LINK for data communication (page 12).

To transfer Watch landmark, track point, and route plan data to SATELLITE NAVI LINK

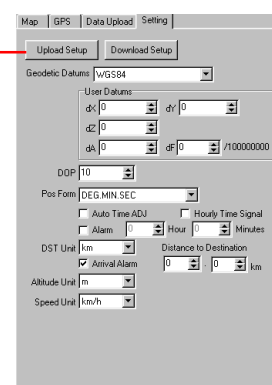
1. Start SATELLITE NAVI LINK.
2. Click the **Data Upload** tab.
3. Put a check mark into one or more box to specify the type of data you want to transfer.
4. In the **Title** box of each data type you check, type in a name for the data.
5. When everything is the way you want, click **Start**.
6. Perform steps 3 through 5 under “To perform data communication” on page 13.
7. After data communication is complete, click the SATELLITE NAVI LINK **GPS** tab.
8. Click on the tab of the data type you just transferred (**Landmark**, **Track**, **Waypoint**) to view a list of the data.



To transfer Watch setup data to SATELLITE NAVI LINK

1. Start SATELLITE NAVI LINK.
2. Click the **Setting** tab.
3. Click the **Upload Setup** button.
4. Perform steps 3 through 5 under “To perform data communication” on page 13.
5. The “OK” message appears on the Watch’s **PC INTERFACE** Screen when data transfer is complete.

Upload Setup
button



To transfer all Watch data to SATELLITE NAVI LINK

1. Start SATELLITE NAVI LINK.
2. On the SATELLITE NAVI LINK **Watch** menu, click **Upload** and then **Upload All Data**.
3. Perform steps 3 through 5 under “To perform data communication” on page 13.
4. The “OK” message appears on the Watch’s **PC INTERFACE** Screen when data transfer is complete.

PC-to-Watch Data Transfer

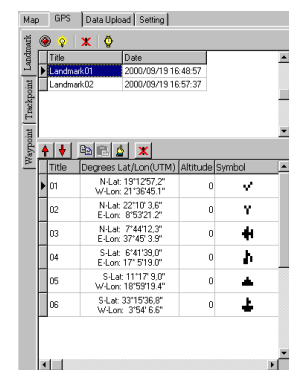
Use the procedures in this section when you want to transfer landmark, track point, route plan, or setup data from SATELLITE NAVI LINK to your Watch.

Important!

- Sending even one landmark, track point, or waypoint (route plan) from your computer to the Watch causes all of the landmarks, track points, or waypoints (route plan) in Watch memory to be deleted and replaced by the data you send. If you need the data in Watch memory, be sure to make a backup copy before sending data from your computer to the Watch.
- Before performing the procedures in this section, make sure you connect the Interface/Charger Unit to your computer (page 12) and configure SATELLITE NAVI LINK for data communication (page 12).

To transfer SATELLITE NAVI LINK landmark, track point, and route plan data to the Watch

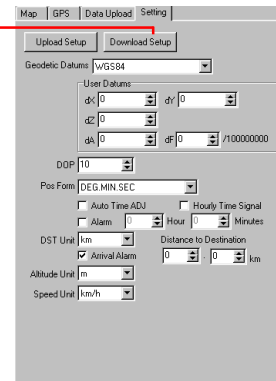
1. Start SATELLITE NAVI LINK.
2. Click the **GPS** tab.
3. On the left side of the **GPS** tab, click the data type tab for the type of data (**Landmark**, **Track**, **Waypoint**) you want to transfer.
4. In the upper part of the tab, click the name of the set of data you want to download.
5. Click the  button.
6. Perform steps 3 through 5 under “To perform data communication” on page 13.
7. The “OK” message appears on the Watch’s **PC INTERFACE** Screen when data transfer is complete.



To transfer setup data from SATELLITE NAVI LINK to the Watch

1. Start SATELLITE NAVI LINK.
2. Click the **Setting** tab.
3. Configure the watch setup using the settings on the tab.
 - See SATELLITE NAVI LINK online help for details about settings.
 - You can make AREA settings on the Watch only. You cannot make them using SATELLITE NAVI LINK.

**Download
Setup** button



4. After everything is the way you want, click **Download Setup** button.
5. Perform steps 3 through 5 under “To perform data communication” on page 13.
6. The “OK” message appears on the Watch’s **PC INTERFACE** Screen when data transfer is complete.

Exporting and Importing Data

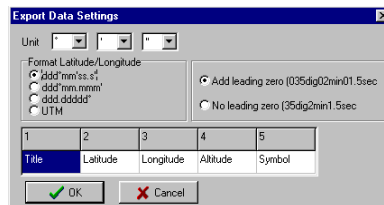
You can export landmark, route plan, and track point data for long-term storage on your computer disk in a CSV format file. Data can be re-imported into SATELLITE NAVI LINK when you need it.

Important!

- The following describes the procedure for exporting and importing landmarks only. The procedures for waypoints and track points are similar. See online help for more information.
- You can export (**File – Export – Export Map Registration**) the configuration (latitude and longitude, path to the source image data files) of map images you register before uninstalling SATELLITE NAVI LINK. Then when you re-install, you can import (**File – Import – Import Map Registration**) the configuration for quick and easy re-registration.

To export landmarks

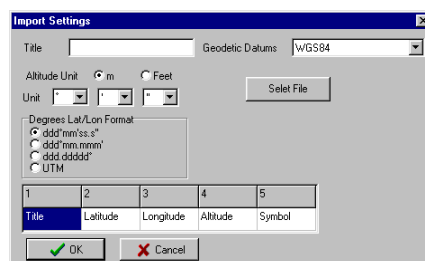
1. Click the **GPS** tab, and then click the **Landmark** data type tab.
2. Click the name of the landmark group you want to export.
3. On the **File** menu, click **Export** and then **Export Landmark Set**.
4. On the menu box that appears, specify the format of the export data, and then click **OK**.



5. On the next dialog box that appears, specify the folder and the file name where you want the data exported, and then click **Save**.

To import landmarks

1. Display the detailed view of the area that contains the landmarks you want to display.
2. Click the **GPS** tab, and then click the **Landmark** data type tab.
3. On the **File** menu, click **Import** and then **Import Landmark Set**.
4. On the dialog box that appears, select the CSV file that contains the landmark data, and then click **Open**.
- This imports the data and lists it as a landmark group in the landmark group list.
5. On the menu box that appears, specify the format of the import data, and then click **OK**.



- This displays a dialog box for importing data, showing the text data you selected for import.
- Make sure the data format of the CSV file you are importing is the same as the settings you specify when importing the file. Pay particular attention to the degrees, minutes, and seconds setting, and the display format.

Troubleshooting Guide

Problem	Recommended Action
When setting up for data communication, I cannot specify the COM port on the Preferences dialog box.	• Check to make sure your COM port is enabled. Display the Windows Device Manager tab, double-click Ports, and then Communications Port. Check to make sure that the check box that enables and disables the COM port is unchecked. • Check to make sure that the COM port is not being used by another application already. If it is, quit the application that is using the COM port. This problem tends to happen often when you are using a resident PDA application, which is indicated by the application's icon being on the Taskbar.
The software does not seem to be recognizing the COM port.	• On the File menu, click Preferences to display the Preferences dialog box. Check the COM Port box setting. If it is blank, it means that nothing is currently specified for the COM port. On your Windows desktop, right-click My Computer and then click the Device Manager tab. Next, check the COM port (COM/LPT) configuration.
I could specify the COM port on the Preferences dialog box without any problem, but I cannot perform data communication.	• If you are using multiple COM port connections on your computer, check to make sure that the COM port where the Interface/Charger Unit is connected is the one you have specified on the Preferences dialog box. • Make sure you are using the serial cable that comes bundled with the Watch. Data communication may be impossible if you use a different cable.
Menu commands and icons are not displayed on the screen when I try to perform data communication.	• Check if there is GPS data (landmarks, track points, waypoints) displayed on the on-screen map. To perform data communication, you must first turn off display of GPS data.

Problem	Recommended Action
I keep getting errors during data communication.	• Make sure you are using the serial cable that comes bundled with the Watch. Data communication may be impossible if you use a different cable. • Check the contacts where the Interface/Charger Unit and Watch connect to each other for dirt or dust. If they are dirty, clean them off. • Check to make sure the AC adaptor is connected to the Interface/Charger Unit. Data communication errors can be caused by low watch battery power. • Check to make sure the serial cable is securely connected to the Interface/Charger Unit and your computer. • Certain types of computers may require a slower data transfer speed (data rate). Display the Preferences dialog box and change the Data Rate setting to Mid or Low. Doing so slows down data transfer, but it also reduces the chance of error. • Performing the following procedure can also help to reduce communication errors. On your Windows desktop, right-click My Computer and then click the Device Manager tab. Right-click the port and then Properties. Display the Port Settings tab, and then click Restore Defaults. • If the above actions do not correct the problem, go to Device Manager and display the COM port's Port Settings tab again. There, try changing the Bits per second setting, or click the Advanced button and try lowering the buffer settings.

Problem	Recommended Action
I keep getting the “NG” message on the Watch display whenever I mount it onto the Interface/Charger Unit.	• With some computer models, the “NG” message may appear if you mount the Watch onto the Interface/Charger Unit before preparing SATELLITE NAVI LINK for data communication. Just start data communication as you normally would and the “NG” message should change to the normal data communication screen.
I keep getting an error when importing data.	• Make sure the data format of the CSV file you are importing is the same as the settings you specify when importing the file. Pay particular attention to the degrees, minutes, and seconds setting, and the display format.
When I click on a location in the General Map, the Detailed Map of the area where I click does not appear.	• This can happen when the area of detailed map for the location you are clicking in the general map too small, relative to the General Map. When this happens, click the  button and select the detailed map you want from the list on the dialog box that appears. • You can avoid this problem by registering relatively large areas for detailed maps of different sizes when registering map images.
I cannot change the size of the vector map window.	• On the Windows Control Panel, double-click Display, click the Effects tab, and then uncheck the Show window contents while dragging option.
I cannot input lower-case characters for GPS data titles.	• Upper-case characters, numbers, and the period, slash, colon, and space are supported for titles. Lower-case characters cannot be used because the Watch does not support them.

Problem	Recommended Action
I cannot find where the GPS data sent from the Watch is stored on my computer's hard disk.	• GPS data files are stored in a folder named DATA, which is located in the CASIO SATELLITE NAVI folder. • Note that uninstalling or re-installing SATELLITE NAVI LINK deletes the DATA folder, so we recommend that you save a backup copy of the folder in another location. • Note that you can also use the data export function to save individual CSV files that contain GPS data. We recommend you always keep backup copies of important GPS data. Exported data can be retrieved using SATELLITE NAVI LINK's import function.